

Notice of Allowability

Application No.

10/762,795

Examiner

Allen C. Ho

Applicant(s)

BRUDER ET AL.

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 19 August 2005.
2. ☒ The allowed claim(s) is/are 1-3, 5-20 and 22-39.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steven H. Noll (Reg. No. 28,982) on 29 September 2005.

The application has been amended as follows:

- (1) Page 12, line 21, --defined by edge rays 37-- has been inserted after " $2\beta_1$ ".
- (2) Claim 38, line 4, "an arcuate" has been replaced by --a--.

Allowable Subject Matter

2. Claims 1-3, 5-20, and 22-39 are allowed.
3. The following is an examiner's statement of reasons for allowance:

With regard to claims 1-3 and 5-15, although the prior art discloses an imaging tomography apparatus comprising a first data acquisition system comprising a first radiator and an arcuate first detector, a second data acquisition system comprising a second radiator and an arcuate second detector, a gantry to which the first data acquisition system and the second data acquisition system are mounted for rotation around a common rotation axis, the first data acquisition and the second data acquisition system respectively scanning maximum measurement fields that differ in size from each other, with the first data acquisition system generating a first set of computed tomography projection data and the second data acquisition system generating a

second set of computed tomography projection data, it fails to teach or fairly suggest that the first detector has a first length measured in an azimuthal direction being different from a second length measured in the azimuthal direction of the second detector as claimed.

With regard to claims 16 and 17, although the prior art discloses an imaging tomography apparatus comprising a first data acquisition system comprising a first radiator and a first detector, a second data acquisition system comprising a second radiator and a second detector, a gantry to which the first data acquisition system and the second data acquisition system are mounted for rotation around a common rotation axis, one of the first and second data acquisition systems having a larger maximum measurement field and the other of the first and second data acquisition systems has a smaller maximum measurement field, and an operating unit for allowing a selection to be made between a first scanning mode with the larger maximum measurement field and a second scanning mode with the smaller maximum measurement field, and a computer for reconstructing an image, it fails to teach or fairly suggest that the computer reconstructs the image differently dependent on whether the first scanning mode or the second scanning mode is selected as claimed.

With regard to claims 18-20 and 22-37, although the prior art discloses an imaging tomography apparatus comprising a first data acquisition system comprising a first radiator and an arcuate first detector, a second data acquisition system comprising a second radiator and an arcuate second detector, a gantry to which the first data acquisition system and the second data acquisition system are mounted for rotation around a common rotation axis, the first data acquisition and the second data acquisition system respectively scanning maximum measurement fields that differ in size from each other, and a setting arrangement for setting the measurement

field for at least one of the first data acquisition system and the second data acquisition system so that the respective measurement fields differ in size from each other, with the first data acquisition system generating a first set of computed tomography projection data and the second data acquisition system generating a second set of computed tomography projection data, it fails to teach or fairly suggest that the first detector has a first length measured in an azimuthal direction being different from a second length measured in the azimuthal direction of the second detector as claimed.

With regard to claims 38 and 39, although the prior art discloses an imaging tomography apparatus comprising a first data acquisition system comprising a first radiator and a first detector, a second data acquisition system comprising a second radiator and a second detector, a gantry to which the first data acquisition system and the second data acquisition system are mounted for rotation around a common rotation axis, a setting arrangement for setting the measurement field for at least one of the first data acquisition system and the second data acquisition system so that the respective measurement fields differ in size from each other, with one of the first and second acquisition systems having a larger measurement field and the other of the first and second data acquisition systems having a smaller measurement field, an operating unit for allowing a selection to be made between a first scanning mode with the larger maximum measurement field and a second scanning mode with the smaller maximum measurement field, and a computer for reconstructing an image, it fails to teach or fairly suggest that the computer reconstructs the image differently dependent on whether the first scanning mode or the second scanning mode is selected as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Amendment

4. Applicant's amendments filed 19 August 2005 with respect to the drawings have been fully considered and are persuasive. The objections of the drawings have been withdrawn.
5. Applicant's amendments filed 19 August 2005 with respect to the specification have been fully considered and are persuasive. The objections of the specification have been withdrawn.
6. Applicant's amendments filed 19 August 2005 with respect to claims 9, 11, 26, and 28 have been fully considered and are persuasive. The objections of claims 9, 11, 26, and 28 have been withdrawn.
7. Applicant's amendments filed 19 August 2005 with respect to claims 9 and 26 have been fully considered and are persuasive. The rejection of claims 9 and 26 under 35 U.S.C. 112, second paragraph, has been withdrawn.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- (1) Bruder *et al.* (U. S. Pub. No. 2004/0213371 A1) disclosed a computed tomography apparatus comprising two data acquisition systems.
- (2) Shinno *et al.* (U. S. Pub. No. 2003/0076920 A1) disclosed a computed tomography apparatus comprising two data acquisition systems and a setting arrangement for setting the measurement field for at least one of the first data acquisition system and the second data acquisition system so that the respective measurement fields differ in size from each other (Fig. 19).
- (3) Olivera *et al.* (U. S. Patent No. 6,438,202 B1) disclosed disclosed a computed tomography apparatus comprising two data acquisition systems and a setting arrangement for setting the measurement field for at least one of the first data acquisition system and the second data acquisition system so that the respective measurement fields differ in size from each other.
- (4) Heinzelmann *et al.* (U. S. Patent No. 4,303,830) disclosed a computed tomography apparatus comprising three data acquisition systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen C. Ho
Primary Examiner
Art Unit 2882

29 September 2005